# **EXHIBIT A**



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Application No.

02 740 774.1 - 2402

1.2003.0377MAD

Date 18.05.2005

Applicant

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

### Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

#### ٥f 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2)

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



Costa Roldán, N Primary Examiner for the Examining Division

Enclosure(s):

3 page/s reasons (Form 2906)



Bescheld/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Proces-verbal (Annexe)

Datum

18.05.2005

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Application No.: 02 740 774.1 Demande ne

The examination is being carried out on the following application documents:

#### Description, Pages

1-35

as originally filed

#### Claims, Numbers

1-44

as originally filed

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: ES-A1-0819764 (cited in specification)

D2: ES-A1-2130073

D3: ARAGON J.J. ET AL: 'Evaluation of rat intestinal lactase in vivo with 4galactosylxylose' CLINICA CHIMICA ACTA vol. 210, 30 September 1992, AMSTERDAM, NL, pages 221 - 226, XP000617797

The present application pertains to enzymatic processes to obtain 4-O-beta -D-galactopyranosyl-D-xylose (4-O-β-Gal-D-Xyl), and compositions comprising 4-O-β-Gal-D-Xyl for in vivo evaluation of intestinal lactase in humans.

### 1. NOVELTY, ARTICLE 54 EPC.

- 1.1. By virtue of inclusion of step 5, which pertains to the extraction with solvent and subsequent crystallization of 4-O-B-Gal-D-Xyl, the Examining Division acknowledge novelty over D1. Therefore, claims 1 to 38 are considered novel.
- 1.2. With respect to product claim 39, pertaining to 4-O-β-Gal-D-Xyl, a product is not render novel merely due to the fact that is produced by means of a new process (see GL: C-III, 4.7b) and thus in view of e.g. D1 (cl. 1) or D2 (see Abstract) or D3 (see Abstract), claim 39 is not considered novel. The same reasoning as above applies to product claims 40 to 44.



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## 2. INVENTIVE STEP, ARTICLE 56 EPC.

Document D1 is considered the closest prior art for claim 1. D1 (see claims 1, 2, 8, 12, 13-16, p. 3, example 1) pertains to enzymatic processes to obtain - β-D-galactopyranosyl-D-xyloses, *inter alia* 4-O-β-Gal-D-Xyl

Claim 1 differs from D1 in that it refers to further fractionations amongst which being a crystallization step of the fraction containing 4-O- $\beta$ -Gal-D-Xyl in the presence of acetone/methanol or acetone/water.

The effect associated with this difference is the higher yield of 4-O- $\beta$ -Gal-D-Xyl product.

The problem to be solved is to provide an improved enzymatic process in order to increase the proportion of 4-O- $\beta$ -Gal-D-Xyl product with respect to the 2- and 3-O- $\beta$ -D-galactopyranosyl-D-xylose products in the final mixture.

The solution proposed are the fractionation steps 5 and 6 of claim 1.

The examples demonstrate that this results in a yield at 37 °C of 71:29 (4-O- $\beta$ -Gal-D-Xyl/(2-O- $\beta$ -Gal-D-Xyl+3-O- $\beta$ -Gal-D-Xyl)). No teachings are given in D1 or relevant prior art for that matter that would lead to the skilled person to modify the method of D1 employing said fractionation steps resulting in such high yield for 4-O- $\beta$ -Gal-D-Xyl.

Therefore, claims 1 to 37 are considered inventive.

### 3. CLARITY, ARTICLE 84 EPC.

3.1. Claim 1 uses the term "selected between" in such a way as to lead the reader to believe that alternative means are being claimed. However, in its present wording claim 1 only refers to a series of fractionation steps linked to each other. It is due to this fact that the Examining Division considered that the claim is enable and non-obvious over the prior art. The applicant is encouraged to cancel the term "selected between".



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3.2. Article 84 EPC in conjunction with Rule 88 EPC.

It would appear in claim 1 that certain clerical errors have been made in consideration with the priority document:

- I) 0-5-5% should be corrected,
- ii) 20 ℃ to -170 ℃ should be corrected.

### 4. LAST REMARKS.

- a) If the objections raised above are overcome, then the description should, at the same time, be brought into conformity with the amended claims. Care should be taken during revision not to add subject-matter which extends beyond the content of the application as originally filled (Article 123(2) EPC). Any statements of problem or advantage should be restricted to the letter of reply.
- b) The amendments should be filed by way of replacement pages, avoiding unnecessary recasting of the description. The applicant should also take account of the requirements of Rule 36(1) EPC. If handwritten amendments are submitted, they should be clearly legible for the printer.

In the reply, the parts of the application, as originally filed, which form the basis for the amendments (cf Article 123(2) EPC)should be clearly indicated.

In order to expedite the procedure, the applicant is kindly asked to clearly point out where the amendments have been made, possibly by enclosing a copy of the original pages with the corrections in the manuscript.

c) To meet the requirement of Rule 27(1)(b) EPC, document D3 should be identified in the description and the relevant background art disclosed therein should be briefly discussed if the subject-matter for which these documents are relevant prior art remains in the claims.